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Serial No.: 10/019,706 Attorney Docket No.: 20496/364



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 3726

Examiner: J. Cozart

Applicant	:	Stefan KASTNER, et al.
Serial No.	:	10/019,706
Filed	:	May 1, 2002
For	:	METHOD FOR PRODUCING AN ALUMINUM COMPOSITE MATERIAL

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

LETTER ACCOMPANYING APPEAL BRIEF

Submitted herewith is an Appeal Brief for the above-identified patent application.

The Commissioner is hereby authorized to charge the fee of $500 from Deposit Account No. 16-2500 of the undersigned.

Respectfully submitted,

PROSKAUER ROSE LLP

By Deborah M. Vernon

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Date: February 13, 2006

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S.N.: 10/019,706 Attorney Docket No.: 20496/364



IN THE UNITED STATES PATENT & TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Group Art Unit: 3726
Examiner: J. Cozart

Application of:		Stefan KASTNER, et al.
Serial No.	:	10/019,706
Filing Date	:	May 1, 2002
Entitled	:	METHOD FOR PRODUCING AN ALUMINUM COMPOSITE MATERIAL

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Appellant submits the following Brief on Appeal in connection with the above-identified patent application.

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I. REAL PARTY IN INTEREST

The real party in interest in the above application is the assignee of record, Hydro Aluminium Deutschland GmbH of Germany, which is a subsidiary of Hydro Aluminium which is a subsidiary of Norsk Hydro, both of Norway.

II. RELATED APPEALS AND INTERFERENCES

There are no other prior or pending appeals, interferences or judicial proceedings known to appellant, the appellant's legal representative, or the assignee which may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-17 were presented for examination.

Claims 1-5 have been cancelled.

Claims 6-17 have been rejected.

Claims 6-17 are on appeal.

IV. STATUS OF AMENDMENTS

Appellant has not filed an Amendment Under 37 C.F.R. §1.116.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Referring to the Substitute Specification and the Drawings, the invention of independent claim 6 is a method for producing an aluminum composite material. See page 1, lines 4-5. The method includes cutting at least one cladding layer (2, 3, or 4 in FIGS. 1 and 2) of a specified thickness suitable for use as a cladding layer from a first ingot made from a first aluminum material (page 4, lines 26-34; and page 5, lines 1-13, and lines 31-32); placing the cladding layer (2, 3, or 4 in FIGS. 1 and 2) on a side of a second ingot (1 in FIG. 1) made from a second aluminum material (page 7, lines 2-8 and lines 24-29); and rolling the cladding layer (2, 3, or 4 in FIGS. 1 and 2) and the second ingot (1 in FIG. 1), wherein rolling includes several roll passes to produce the aluminum composite material (page 7, lines 2-8).

Independent claim 14 is a method for producing at least one aluminum cladding layer from a first ingot made from a first aluminum material. See page 1, lines 8-10. The cladding layer (2, 3, or 4 in FIGS. 1 and 2) produced by the method of claim 14 is for use in an aluminum composite material, which is produced at least partially by placing the cladding layer on a side of a second ingot made from a second aluminum material, and rolling the cladding layer and said the ingot with several roll passes to produce the composite material. See page 7, lines 13-21. The method of independent claim 14 includes cutting the aluminum cladding sheet (2, 3, or 4 in FIGS. 1 and 2) from the first ingot (5 in FIG. 2) at a specified thickness suitable for use as a cladding sheet for the composite material. See page 7, lines 20-23.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection on appeal are:

(1) the rejection of claims 6, 11-14, 16 and 17 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,172,923 (Kawase et al., hereinafter '923);

(2) the rejection of claims 7-10 and 15 under 35 U.S.C. 103(a) as being unpatentable over '923 in view of U.S. Patent No. 2,730,792 (Ronan, hereinafter '792).

VII. ARGUMENT

A. The Rejection of Claims 6, 11-14, 16 and 17 Under 35 U.S.C. 102(b)

In the final Office Action dated September 13, 2005, the Examiner finally rejected independent claims 6 and 14 under 35 U.S.C. 102(b) as being anticipated by '923. According to the Examiner, '923 discloses producing an aluminum composite material by cutting at least one cladding layer of a specified thickness suitable for use as a cladding layer from a first ingot made from a first aluminum material, then placing the cladding layer on a side of a second ingot made from a second aluminum material, and rolling the cladding layer and the second ingot, wherein rolling comprises several roll passes thereby producing the aluminum composite material. Although the Examiner acknowledged that '923 discloses a method in which the cladding layer is cut from a sheet (see, page 4 of the final Office Action), the Examiner has maintained his rejection of claims 6 and 14. Specifically, the Examiner argues that claims 6 and 14 include the transitional term "comprising" which is an inclusive or open-ended term and does not exclude additional, unrecited elements or methods steps. The Examiner has cited section 2111.03 in the M.P.E.P. to support his position.

With all due respect to the Examiner, the issue herein is not whether the transitional term excludes the method taught in '923. The issue under 35 U.S.C. 102(b) is whether '923 teaches each of the elements recited in claims 6 and 14. Applicants respectfully submit that the disclosure of '923 fails to teach "or suggest" all of the

elements of Applicants' independent claims 6 and 14. Thus, pursuant to M.P.E.P. section 2131, '923 fails to anticipate Applicants' invention as claimed.

The plain language of Applicants' independent claims 6 and 14 require ***cutting at least one cladding layer from an ingot***. The term "ingot" is understood as referring to "a mass of metal cast into a convenient shape." As casting is a process in which liquid metal is poured into a mold to form a shape, Applicants respectfully submit that the term "ingot" or "a mass of metal cast into a convenient shape" is exclusionary of a sheet of metal that has been hot-rolled. Applicants submit herewith in the attached Evidence Appendix copies of the definition of ingot from several commonly-available sources. Applicants request that the Board to take Judicial Notice of the meaning of "ingot." In further support of their position, Applicants direct the Board to page 4, lines 26-34 of Applicants' Substitute Specification, which defines the term ingot as being exclusive of a sheet of material that is produced by hot-rolling. Accordingly the term "ingot" does not include a sheet or strip that has been hot-rolled, as asserted by the Examiner.

In stark contrast to Applicants' claimed invention, the disclosure of '923 merely teaches cutting a cladding layer from a "sheet" of material that has been hot-rolled. Specifically, '923 teaches cutting a cladding layer from an ingot which is heated and hot-rolled to a thickness of 5 mm. After hot rolling, the sheet to be used as cladding material is cut out from the hot rolled material. See col. 5, line 50 to col. 6, line 9 in '923. All examples shown in '923 comprise cutting the cladding material from a hot-rolled sheet. Applicants respectfully submit that for a person skilled in the art it is obvious that an

ingot which is hot-rolled to a certain thickness is no longer an ingot, but rather a strip or sheet of material. As a result, the disclosure of '923 clearly describes cutting the cladding layer from a strip or sheet and not from an ingot, as claimed by Applicants.

Moreover, while the Examiner on page 4 of the final Office action contends that Applicants' claims 6 and 14 do not specify that an ingot must not be treated prior to being cut, Applicants respectfully submit that the plain language of claims 6 and 14 require that the cladding layer be cut from an ingot. As such, in accordance with the plain language of claims 6 and 14, this requires that an ingot be present at the moment the cladding layer is cut from it. According to the disclosure of '923, only a hot-rolled sheet or strip exists at the moment the cladding layer is cut. See col. 6, lines 1-3 in '923. As a result, '923 can not possibly teach or suggest cutting a cladding layer from an ingot at least because no ingot exists when the cladding layer is cut according to the disclosure of '923.

Due to all of the foregoing reasons, Applicants respectfully submit that '923 fails to anticipate Applicants' independent claims 6 and 14. As claims 11-13, 16 and 17 depend from one of claims 6 or 14 and contain all of their limitations, they too are not anticipated by '923 for reasons similar to those given above.

B. The Rejection of Claims 7-10 and 15 Under 35 U.S.C. 103(a) Over '923 in view of '792

The Examiner finally rejected claims 7-10 and 15 under 35 U.S.C. 103(a) as being unpatentable over '923 in view of '792. Claims 7-10 depend directly or indirectly from

claim 6, and claim 15 depends directly from claim 14. As a result, claims 7-10 and 15 also include the limitation of cutting a cladding layer from an ingot.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the references or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all of the claim limitations. M.P.E.P. 706.02(j). In the present case, the Examiner has failed to make a *prima facie* case of obviousness at least because the references fail to teach or suggest all of the claim limitations.

As discussed above and incorporated herein by reference, the disclosure of '923 fails to anticipate claims 6 and 14, because '923 fails to teach cutting a cladding layer from an ingot. The disclosure of '792 merely discloses a metal saw for cutting metal and other material. See col. 1, lines 15-24 in '792. The Examiner has failed to make a *prima facie* case because the disclosure of '792 fails to cure the deficiencies of '923. That is neither '792 nor '923, viewed alone or in proper combination, teach or suggest cutting at least one cladding layer from an ingot as required by claims 6 and 14. As a result, claims 6 and 14 are patentable over '792 and '923, alone or in combination.

Accordingly, claims 7-11 and 15, which depend from either claim 6 or claim 14 are not rendered unpatentable by '923 in view of '792.

VIII. CLAIMS APPENDIX

Claims 1-5. Cancelled.

Claim 6. A method for producing an aluminum composite material comprising:

cutting at least one cladding layer of a specified thickness suitable for use as a cladding layer from a first ingot made from a first aluminum material;

placing said cladding layer on a side of a second ingot made from a second aluminum material; and

rolling said cladding layer and said second ingot, said rolling comprising several roll passes thereby producing said aluminum composite material.

Claim 7. The method of claim 6 wherein said cutting comprises sawing said cladding layer from said first ingot.

Claim 8. The method of claim 7 wherein, after said cutting, said cladding layer has a thickness of 2 mm to 100 mm.

Claim 9. The method of claim 8 further comprising, prior to said rolling, treating a surface from the group consisting of:

(a) at least one surface of said cladding layer;

(b) at least one surface of said second ingot; and

(c) a combination of (a) and (b).

Claim 10. The method of claim 7 further comprising, prior to said rolling, treating a surface from the group consisting of:

(a) at least one surface of said cladding layer;

(b) at least one surface of said second ingot; and

(c) a combination of (a) and (b)

Claim 11. The method of claim 6 wherein, after said cutting, said cladding layer has a thickness of 2 mm to 100 mm.

Claim 12. The method of claim 11 further comprising, prior to said rolling, treating a surface from the group consisting of:

(a) at least one surface of said cladding layer;

(b) at least one surface of said second ingot; and

(c) a combination of (a) and (b).

Claim 13. The method of claim 6 further comprising, prior to said rolling, treating a surface from the group consisting of:

(a) at least one surface of said cladding layer;

(b) at least one surface of said second ingot; and

(c) a combination of (a) and (b).

Claim 14. A method for producing at least one aluminum cladding layer from a first ingot made from a first aluminum material, said cladding layer for use in an aluminum composite material, said composite material being produced at least partially by (1) placing said cladding layer on a side of a second ingot made from a second aluminum material, and (2) rolling said cladding layer and said second ingot, said rolling comprising several roll passes thereby producing said composite material, said method

comprising cutting said aluminum cladding sheet from said first ingot at a specified thickness suitable for use as a cladding sheet for said composite material.

Claim 15. The method of claim 14 wherein said cutting comprises sawing said cladding layer from said first ingot.

Claim 16. The method of claim 14 wherein, after said cutting, said cladding layer has a thickness of 2 mm to 100 mm.

Claim 17. The method of claim 14 further comprising, prior to said rolling, treating at least one surface of said cladding layer.

IX. EVIDENCE APPENDIX

Exhibit A attached hereto is a true copy of the definition of "Ingot" as provided by Wikipedia at website address http://en.wikipedia.org/wiki/Ingot.

Exhibit B attached hereto is a true copy of the definition of "ingot" as provided by Dictionary.com at website address http://dictionary.reference.com/search?q=ingot.

Exhibit C attached hereto is a true copy of the definition of "ingot" as provided by Merriam Webster's Collegiate® Dictionary, 10th Edition, published by Merriam-Webster, Inc., Springfield, MA, 2002.

Exhibit D attached hereto is a true copy of the definition of "casting" as provided by Dictionary.com at website address http://dictionary.reference.com/search?q=casting.

X. RELATED PROCEEDINGS APPENDIX

None.

XI. CONCLUSION

For the reasons stated above, it is requested that the Examiner's final rejection of claims 6, 11-14, 16, and 17 under 35 U.S.C. 102(b) and final rejection of claims 7-10 and 15 under 35 U.S.C. 103(a) be reversed.

Respectfully submitted,

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Date: February 13, 2006

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Ingot

Exhibit A

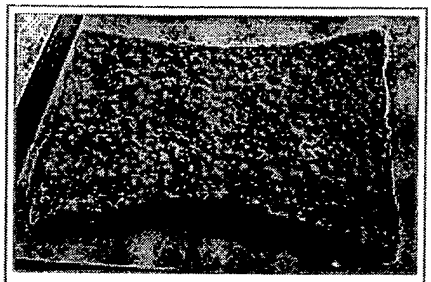
From Wikipedia, the free encyclopedia

Note: There is also a computer certificate called INGOT

An **ingot** is a mass of metal or semiconducting material, heated past the melting point, and then recast, typically into the form of a bar or block.

More generally, these objects are typically cast into a specific shape with the aim of rendering them easy to handle. Additionally, ingots may be molds from which metal objects are cast.

In the semiconductor industry single crystal ingots (often called boules) of semiconductor materials can be *grown* by methods such as the Czochralski process or Bridgeman technique. These are then cut up and polished to provide wafers on which semiconductor devices, ranging from microprocessors to light emitting diodes can be fabricated.



Ancient Copper **ingot** from Zakros, Crete. The ingot is shaped in the form of an animal skin, a typical shape of copper ingots from these times

Retrieved from "http://en.wikipedia.org/wiki/Ingot"

Category: Science stubs

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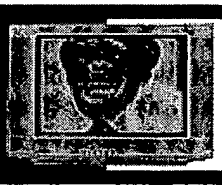
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Top Web Results for "ingot"

4 entries found for *ingot*.

Exhibit B

in·got [P] **Pronunciation Key** (ĭng'gət)
n.

1. A mass of metal, such as a bar or block, that is cast in a standard shape for convenient storage or shipment.
2. A casting mold for metal.

[Middle English, *mold for casting metal* : probably `in-`, *in*; see **in-**[2] + Old English `goten`, past participle of `geotan`, *to pour,* or perhaps from Old French `lingot`, *metal ingot* (reinterpreted as `l'ingot : le`, *the* + `*ingot`, *ingot*).]

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Source: *The American Heritage® Dictionary of the English Language, Fourth Edition*
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Ingot

Gold in bar form.

Investopedia Commentary

Gold held in the vaults of banks and brokerages are usually in the form of ingot.

See also: Bullion, Fool's Gold, Hedge, Inflation, Precious Metal

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ingot

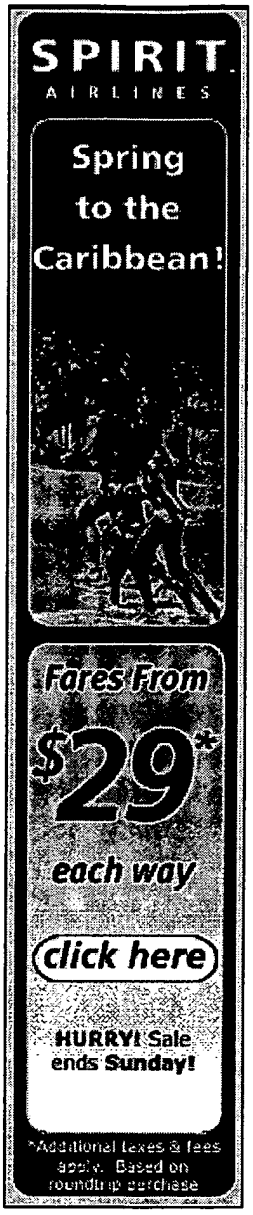
n : a block of metal that is cast in a particular shape for convenient handling [syn: metal bar, block of metal]

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ingot

ingot in InvestorWords

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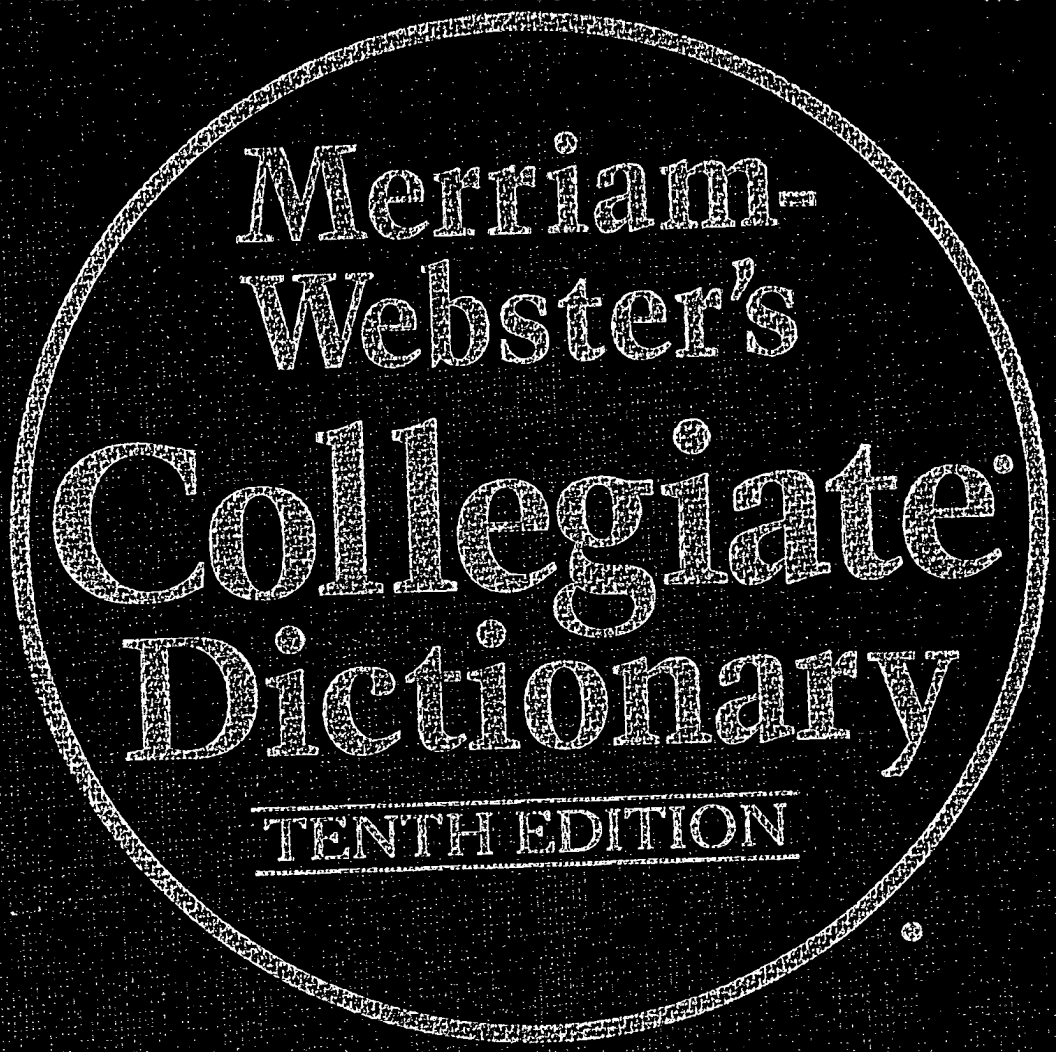
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Exhibit C





Merriam-Webster's Collegiate® Dictionary

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TENTH EDITION

Merriam-Webster, Incorporated
Springfield, Massachusetts, U.S.A.



A GENUINE MERRIAM-WEBSTER

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in·fran·gi·bil·i·ty \-ˌfran-jə-ˈbi-lə-tē\ *n* — **in·fran·gi·bly** \-ˈfran-jə-blē\ *adv*

in·fra·red \ˌin-frə-ˈred, -(ˌ)frä-, -fə-\ *adj* (1881) **1** : situated outside the visible spectrum at its red end — used of radiation having a wavelength between about 700 nanometers and 1 millimeter **2** : relating to, producing, or employing infrared radiation ⟨~ therapy⟩ **3** : sensitive to infrared radiation ⟨~ photographic film⟩ — **infrared** *n*

in·fra·son·ic \ˌin-frə-ˈsä-nik, -(ˌ)frä-\ *adj* (1927) **1** : having or relating to a frequency below the audibility range of the human ear **2** : utilizing or produced by infrasonic waves or vibrations

in·fra·spe·cif·ic \-spi-ˈsi-fik\ *adj* (1939) : included within a species ⟨~ variability⟩

in·fra·struc·ture \ˈin-frə-ˌstrək-chər, -(ˌ)frä-\ *n* (1927) **1** : the underlying foundation or basic framework (as of a system or organization) **2** : the permanent installations required for military purposes **3** : the system of public works of a country, state, or region; *also* : the resources (as personnel, buildings, or equipment) required for an activity

in·fre·quence \(ˌ)in-ˈfrē-kwən(t)s\ *n* (1644) : INFREQUENCY

in·fre·quen·cy \-kwən(t)-sē\ *n* (1677) : rarity of occurrence

in·fre·quent \(ˌ)in-ˈfrē-kwənt\ *adj* [L *infrequent-, infrequens,* fr. *in-* + *frequent-, frequens* frequent] (1531) **1** : seldom happening or occurring : RARE **2** : placed or occurring at wide intervals in space or time ⟨a slope scattered with ~ pines⟩ ⟨~ visits⟩ — **in·fre·quent·ly** *adv*

syn INFREQUENT, UNCOMMON, SCARCE, RARE, SPORADIC mean not common or abundant. INFREQUENT implies occurrence at wide intervals in space or time ⟨*infrequent* family visits⟩. UNCOMMON suggests a frequency below normal expectation ⟨smallpox is now *uncommon* in many countries⟩. SCARCE implies falling short of a standard or required abundance ⟨jobs were *scarce* during the Depression⟩. RARE suggests extreme scarcity or infrequency and often implies consequent high value ⟨*rare* first editions⟩. SPORADIC implies occurrence in scattered instances or isolated outbursts ⟨*sporadic* cases of influenza⟩.

in·fringe \in-ˈfrinj\ *vb* **in·fringed; in·fring·ing** [ML *infringere,* fr. L, to break, crush, fr. *in-* + *frangere* to break — more at BREAK] *vt* (1533) **1** : to encroach upon in a way that violates law or the rights of another ⟨~ a patent⟩ **2** *obs* : DEFEAT, FRUSTRATE ~ *vi* : ENCROACH — used with *on* or *upon* ⟨~ on our rights⟩ *syn* see TRESPASS — **in·fring·er** *n*

in·fringe·ment \in-ˈfrinj-mənt\ *n* (1628) **1** : the act of infringing : VIOLATION **2** : an encroachment or trespass on a right or privilege

in·fun·dib·u·lar \ˌin-(ˌ)fən-ˈdi-byə-lər\ *adj* (1795) **1** : INFUNDIBULIFORM **2** : of, relating to, or having an infundibulum

in·fun·dib·u·li·form \-lə-ˌfȯrm\ *adj* [NL *infundibulum* + E *-iform*] (1752) : having the form of a funnel or cone

in·fun·dib·u·lum \ˌin-(ˌ)fən-ˈdi-byə-ləm\ *n, pl* **-la** \-lə\ [NL, fr. L, funnel — more at FUNNEL] (1543) : any of various funnel-shaped organs or parts as **a** : the hollow conical process of gray matter by which the pituitary gland is continuous with the brain **b** : the calyx of a kidney **c** : the abdominal opening of a fallopian tube

in·fu·ri·ate \in-ˈfyůr-ē-ˌāt\ *vt* **-at·ed; -at·ing** [ML *infuriatus,* pp. of *infuriare,* fr. L *in- + furia* fury] (1667) : to make furious — **in·fu·ri·at·ing·ly** \-ˌā-tiŋ-lē\ *adv* — **in·fu·ri·a·tion** \-ˌfyůr-ē-ˈā-shən\ *n*

in·fu·ri·ate \in-ˈfyůr-ē-ət\ *adj* (1667) : furiously angry

in·fuse \in-ˈfyüz\ *vt* **in·fused; in·fus·ing** [ME, to pour in, fr. MF & L; MF *infuser,* fr. L *infusus,* pp. of *infundere* to pour in, fr. *in- + fundere* to pour — more at FOUND] (1526) **1 a** : to cause to be permeated with something (as a principle or quality) that alters usu. for the better ⟨~ a team with confidence⟩ **b** : INTRODUCE, INSINUATE ⟨a new spirit *infused* into American art —*Amer. Guide Series: N.Y.*⟩ **2** : INSPIRER, ANIMATE ⟨the sense of purpose that *infuses* scientific research⟩ **3** : to steep in liquid (as water) without boiling so as to extract the soluble constituents or principles — **in·fus·er** *n*

syn INFUSE, SUFFUSE, IMBUE, INGRAIN, INOCULATE, LEAVEN mean to introduce one thing into another so as to affect it throughout. INFUSE implies a pouring in of something that gives new life or significance ⟨new members *infused* enthusiasm into the club⟩. SUFFUSE implies a spreading through of something that gives an unusual color or quality ⟨a room *suffused* with light⟩. IMBUE implies the introduction of a quality that fills and permeates the whole being ⟨*imbue* students with intellectual curiosity⟩. INGRAIN, used only in the passive or past participle, suggests the deep implanting of a quality or trait ⟨clung to *ingrained* habits⟩. INOCULATE implies an imbuing or implanting with a germinal idea and often suggests stealth or subtlety ⟨an electorate *inoculated* with dangerous ideas⟩. LEAVEN implies introducing something that enlivens, tempers, or markedly alters the total quality ⟨a sermon *leavened* with comic moments⟩.

in·fus·ible \(ˌ)in-ˈfyü-zə-bəl\ *adj* (1555) : incapable of being fused : very difficult to fuse — **in·fus·ibil·i·ty** \-ˌfyü-zə-ˈbi-lə-tē\ *n* — **in·fus·ible·ness** \in-ˈfyü-zə-bəl-nəs\ *n*

in·fu·sion \in-ˈfyü-zhən\ *n* (15c) **1** : the act or process of infusing **2** : a product obtained by infusing **3** : the continuous slow introduction of a solution esp. into a vein

in·fu·so·ri·al earth \ˌin-fyü-ˈzōr-ē-əl-, -ˈsōr-, -ˈzȯr-, -ˈsȯr-\ *n* (1882) : DIATOMACEOUS EARTH

in·fu·so·ri·an \-ē-ən\ *n* [ultim. fr. L *infusus*] (1859) : any of a heterogeneous group of minute organisms found esp. in decomposing infusions of organic matter; *esp* : a ciliated protozoan — **infusorian** *adj*

-ing \iŋ *also* ēŋ; *in some dialects & in other dialects informally* in, ən *also after certain consonants* ᵊn, ᵊm, ᵊŋ\ *n suffix* [ME, fr. OE *-ung, -ing,* suffix forming nouns from verbs; akin to OHG *-ung,* suffix forming nouns from verbs] **1** : action or process ⟨running⟩ ⟨sleeping⟩ : instance of an action or process ⟨a meeting⟩ **2 a** : product or result of an action or process ⟨an engraving⟩ — often in pl. ⟨earnings⟩ **b** : something used in an action or process ⟨a bed covering⟩ ⟨the lining of a vest⟩ **3** : action or process connected with (a specified thing) ⟨boating⟩ **4** : something connected with, consisting of, or used in making (a specified thing) ⟨scaffolding⟩ ⟨shirting⟩ **5** : something related to (a specified concept) ⟨offing⟩

-ing *suffix* [ME, fr. OE *-ing, -ung;* akin to OHG *-ing* one of a (specified) kind ⟨sweeting⟩

-ing *suffix or adj suffix* [ME, prob. fr. ¹*-ing*] — used to form the present participle ⟨sailing⟩ and sometimes to form an adjective resembling a present participle but not derived from a verb ⟨swashbuckling⟩

Though the pronunciation of -ing with the consonant \n\, misleadingly referred to as "dropping the g," is often deprecated, this pronunciation is frequently heard. It is not known for certain why the Middle English present participle ending -ende was replaced by -ing. Analogy with the earlier noun suffix -ing prob. had something to do with it. In early Modern English, present participles were regularly formed with -ing pronounced \iŋg\ (as can still be heard in a few dialects) and later \iŋ\. Evidence also shows that some speakers used \in\ and by the 18th century this pronunciation became widespread. Though teachers (with some success) campaigned against it, \in\ remained a feature of the speech of many of the best speakers in Britain and the U.S. well into the 20th century. It has by now lost its respectability, at least when attention is drawn to it, but throughout the U.S. it persists largely unnoticed and in some dialects it predominates over \iŋ\.

in·gath·er \ˈin-ˌga-thər, -ˌge-\ *vt* (1557) : to gather in ~ *vi* : ASSEMBLE — **in·gath·er·ing** \-ˌgath-riŋ, -ˌgeth-; -ˌga-thə-, -ˌge-\ *n*

in·ge·nious \in-ˈjēn-yəs\ *adj* [ME *ingenyous,* fr. MF *ingenieux,* fr. L *ingeniosus,* fr. *ingenium* natural capacity — more at ENGINE] (15c) **1** *obs* : showing or calling for intelligence, aptitude, or discernment **2** : marked by especial aptitude at discovering, inventing, or contriving **3** : marked by originality, resourcefulness, and cleverness in conception or execution ⟨an ~ contraption⟩ *syn* see CLEVER — **in·ge·nious·ly** *adv* — **in·ge·nious·ness** *n*

in·ge·nue *or* **in·gé·nue** \ˈan-jə-ˌnü, ˈän-; ˈaⁿ-zhə-, ˈäⁿ-\ *n* [F *ingénue,* fem. of *ingénu* ingenuous, fr. L *ingenuus*] (1848) **1** : a naive girl or young woman **2** : the stage role of an ingenue; *also* : an actress playing such a role

in·ge·nu·i·ty \ˌin-jə-ˈnů-ə-tē, -ˈnyů-\ *n, pl* **-ties** (ca. 1592) **1** *obs* : CANDOR, INGENUOUSNESS **2 a** : skill or cleverness in devising or combining : INVENTIVENESS **b** : cleverness or aptness of design or contrivance **3** : an ingenious device or contrivance

¹in·gen·u·ous \in-ˈjen-yə-wəs\ *adj* [by alter.] (1588) *obs* : INGENIOUS

²ingenuous *adj* [L *ingenuus* native, free born, fr. *in-* + *gignere* to beget — more at KIN] (1588) **1** *obs* : NOBLE, HONORABLE **2 a** : showing innocent or childlike simplicity and candidness **b** : lacking craft or subtlety *syn* see NATURAL — **in·gen·u·ous·ly** *adv* — **in·gen·u·ous·ness** *n*

in·gest \in-ˈjest\ *vt* [L *ingestus,* pp. of *ingerere* to carry in, fr. *in-* + *gerere* to bear] (1620) : to take in for or as if for digestion — **in·gest·ible** \-ˈjes-tə-bəl\ *adj* — **in·ges·tion** \-ˈjes-chən, -ˈjesh-\ *n* — **in·ges·tive** \-ˈjes-tiv\ *adj*

in·ges·ta \in-ˈjes-tə\ *n pl* [NL, fr. L, neut. pl. of *ingestus*] (1727) : material taken into the body by way of the digestive tract

in·gle \ˈiŋ-gəl, ˈiŋ-əl\ *n* [ScGael *aingeal*] (1508) **1** : a fire in a fireplace **2** : FIREPLACE **3** : CORNER, ANGLE

in·gle·nook \-ˌnůk\ *n* (1772) : a nook by a large open fireplace; *also* : a bench or settle occupying this nook

in·glo·ri·ous \(ˌ)in-ˈglōr-ē-əs, -ˈglȯr-\ *adj* [L *inglorius,* fr. *in- + gloria* glory] (1573) **1** : SHAMEFUL, IGNOMINIOUS **2** : not glorious : lacking fame or honor — **in·glo·ri·ous·ly** *adv* — **in·glo·ri·ous·ness** *n*

in·got \ˈiŋ-gət\ *n* [ME, perh. modif. of MF *lingot* ingot of metal, incorrectly divided as *l'ingot,* as if fr. *le* the, fr. L *ille* that] (14c) **1** : a mold in which metal is cast **2** : a mass of metal cast into a convenient shape for storage or transportation to be later processed

ingot iron *n* (1877) : iron containing only small proportions of impurities (as less than 0.05 percent carbon)

¹in·grain \(ˌ)in-ˈgrān\ *vt* (ca. 1641) : to work indelibly into the natural texture or mental or moral constitution *syn* see INFUSE

²in·grain \ˈin-ˌgrān\ *adj* (1766) **1 a** : made of fiber that is dyed before being spun into yarn **b** : made of yarn that is dyed before being woven or knitted **2** : thoroughly worked in : INNATE

³in·grain \ˈin-ˌgrān\ *n* (1899) : innate quality or character

in·grained \ˈin-ˌgrānd, (ˌ)in-ˈ\ *adj* (1599) **1** : worked into the grain or fiber **2** : forming a part of the essence or inmost being : DEEP-SEATED ⟨~ prejudice⟩ — **in·grained·ly** \ˈin-ˌgrā-nəd-lē, ˈin-ˌgrānd-lē, (ˌ)in-ˈ\ *adv*

in·grate \ˈin-ˌgrāt\ *n* [L *ingratus* ungrateful, fr. *in-* + *gratus* grateful — more at GRACE] (1622) : an ungrateful person

in·gra·ti·ate \in-ˈgrā-shē-ˌāt\ *vt* **-at·ed; -at·ing** [*²in-* + L *gratia* grace] (1622) : to gain favor or favorable acceptance for by deliberate effort — usu. used with *with* ⟨~ themselves with the community leaders —William Attwood⟩ — **in·gra·ti·a·tion** \-ˌgrā-shē-ˈā-shən\ *n* — **in·gra·tia·to·ry** \-ˈgrā-sh(ē-)ə-ˌtȯr-ē, -ˌtōr-\ *adj*

ingratiating *adj* (1655) **1** : capable of winning favor : PLEASING ⟨an ~ smile⟩ **2** : intended or adopted in order to gain favor : FLATTERING — **in·gra·ti·at·ing·ly** \-ˈgrā-shē-ˌā-tiŋ-lē\ *adv*

in·grat·i·tude \(ˌ)in-ˈgra-tə-ˌtüd, -ˌtyüd\ *n* [ME, fr. MF, fr. ML *ingratitudo,* fr. L *in-* + LL *gratitudo* gratitude] (14c) : forgetfulness of or poor return for kindness received : UNGRATEFULNESS

in·gre·di·ent \in-ˈgrē-dē-ənt\ *n* [ME, fr. L *ingredient-, ingrediens,* prp. of *ingredi* to go into, fr. *in- + gradi* to go — more at GRADE] (15c) : something that enters into a compound or is a component part of any combination or mixture : CONSTITUENT *syn* see ELEMENT — **ingredient** *adj*

in·gress \ˈin-ˌgres\ *n* [ME, fr. L *ingressus,* fr. *ingredi*] (15c) **1** : the act of entering : ENTRANCE **2** : the power or liberty of entrance or access — **in·gres·sion** \in-ˈgre-shən\ *n*

in·gres·sive \in-ˈgre-siv\ *adj* (1649) **1** : of, relating to, or involving ingress; *esp* : produced by ingress of air into the vocal tract ⟨~ sounds⟩ **2** : INCHOATIVE 2 — **ingressive** *n* — **in·gres·sive·ness** *n*

in–group \ˈin-ˌgrüp\ *n* (1907) **1** : a group with which one feels a sense of solidarity or community of interests — compare OUT-GROUP **2** : CLIQUE

in·grow·ing \ˈin-ˌgrō-iŋ\ *adj* (1869) : growing or tending inward

in·grown \-ˌgrōn\ *adj* (1670) **1** : grown in; *specif* : having the free tip or edge embedded in the flesh ⟨an ~ toenail⟩ **2** : having the direction of growth or activity or interest inward rather than outward : WITHDRAWN — **in·grown·ness** \(ˌ)in-ˈgrōn-nəs\ *n*

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Exhibit D

5 entries found for *casting*.

cast Pronunciation Key (kăst)
v. **cast, cast·ing, casts**
v. tr.

   a. To throw (something, especially something light): *The angler cast the line.*
   b. To throw with force; hurl: *waves that cast driftwood far up on the shore.* See Synonyms at throw.
2. To shed; molt.
3. To throw forth; drop: *cast anchor.*
4. To throw on the ground, as in wrestling.
5. To deposit or indicate (a ballot or vote).
6. To turn or direct: *All eyes were cast upon the speaker.*
7. To cause to fall onto or over something or in a certain direction, as if by throwing: *candles casting light; cast aspersions on my character; findings that cast doubt on our hypothesis.*
8. To bestow; confer: "The government I cast upon my brother" (Shakespeare).
9.
   a. To roll or throw (dice, for example).
   b. To draw (lots).
10. To give birth to prematurely: *The cow cast a calf.*
11. To cause (hunting hounds) to scatter and circle in search of a lost

scent.

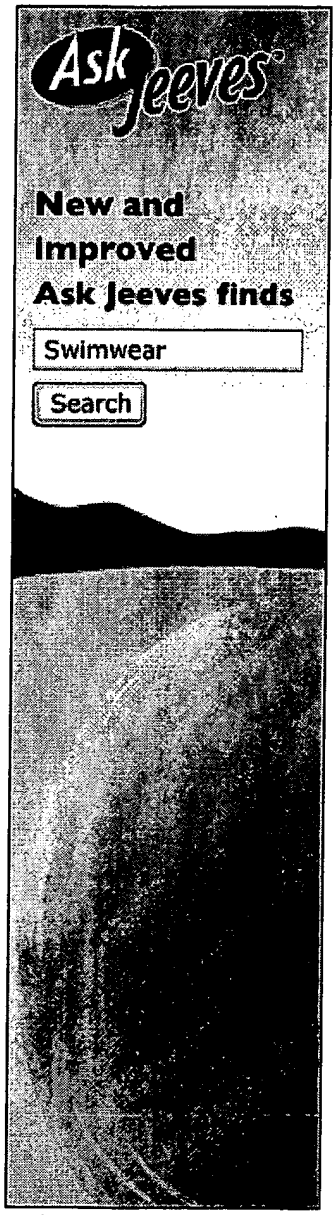
12.
   a. To choose actors for (a play, for example).
   b. To assign a certain role to (an actor): *cast her as the lead.*
   c. To assign an actor to (a part): *cast each role carefully.*
13. To form (liquid metal, for example) into a particular shape by pouring into a mold.
14. To give a form to; arrange: *decided to cast the book in three parts.*
15. To contrive; devise: *cast a plan.*
16. To calculate or compute; add up (a column of figures).
17. To calculate astrologically: *cast my horoscope.*
18. To warp; twist: *floorboards cast by age.*
19. *Nautical.* To turn (a ship); change to the opposite tack.

v. intr.

1. To throw something, especially to throw out a lure or bait at the end of a fishing line.
2. To add a column of figures; make calculations.
3. To make a conjecture or a forecast.
4. To receive form or shape in a mold.
5. To become warped.
6. To search for a lost scent in hunting with hounds.
7. *Nautical.*
   a. To veer to leeward from a former course; fall off.
   b. To put about; tack.
8. To choose actors for the parts in a play, movie, or other theatrical presentation.
9. *Obsolete.* To estimate; conjecture.

n.

   a. The act or an instance of casting or throwing.
   b. The distance thrown.
2.
   a. A throwing of a fishing line or net into the water.
   b. The line or net thrown.
3.
   a. A throw of dice.
   b. The number thrown.
4. A stroke of fortune or fate; lot.
5.
   a. A direction or expression of the eyes.
   b. A slight squint.
6. Something, such as molted skin, that is thrown off, out, or away.
7. The addition of a column of figures; calculation.
8. A conjecture; a forecast.



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9.
   a. The act of pouring molten material into a mold.
   b. The amount of molten material poured into a mold at a single operation.
   c. Something formed by this means: *The sculpture was a bronze cast.*
10. An impression formed in a mold or matrix; a mold: *a cast of her face made in plaster.*
11. A rigid dressing, usually made of gauze and plaster of Paris, used to immobilize an injured body part, as in a fracture or dislocation. Also called **plaster cast**.
12. The form in which something is made or constructed; arrangement: *the close-set cast of her features.*
13. Outward form or look; appearance: *a suit of stylish cast.*
14. Sort; type: *fancied himself to be of a macho cast.*
15. An inclination; tendency: *her thoughtful cast of mind.*
16. The actors in a play, movie, or other theatrical presentation.
17. A slight trace of color; a tinge.
18. A distortion of shape.
19. The circling of hounds to pick up a scent in hunting.
20. A pair of hawks released by a falconer at one time. See Synonyms at flock[1].

Phrasal Verbs:
cast about or **around**

1. To make a search; look: *had to cast about for an hour, looking for a good campsite.*
2. To devise means; contrive.

cast off

1. To discard; reject: *cast off old clothing.*
2. To let go; set loose: *cast off a boat; cast off a line.*
3. To make the last row of stitches in knitting.
4. *Printing* To estimate the space a mansucript will occupy when set into type.

cast on

To make the first row of stitches in knitting.

cast out

To drive out by force; expel.

Idiom:

cast (one's) lot with

To join or side with for better or worse.

[Middle English `casten`, from Old Norse `kasta`.]

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cast·ing **Pronunciation Key** (kăs'tĭng)
n.

a. The act or process of making casts or molds.
b. Something cast in a mold.
2. The act of throwing a fishing line.
3. Something cast off or out.
4. The selection of actors or performers for the parts of a presentation.

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Main Entry: **cast·ing**
Function: *noun*
1 : the act or process of making casts or impressions or of shaping in a mold
2 : something cast in a mold

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casting

n 1: object formed by a mold [syn: cast] 2: the act of creating something by casting it in a mold [syn: molding] 3: the act of throwing a fishing line out over the water by means of a rod and reel [syn: cast] 4: the choice of actors to play particular roles in a play or movie

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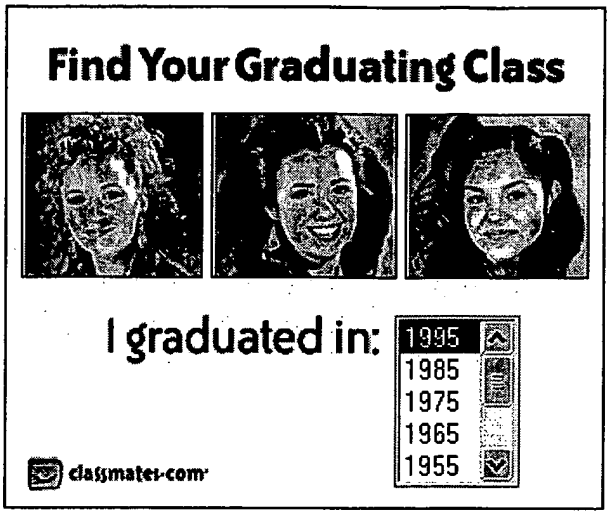
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